

What is claimed is:

1. A liquid crystal display element configured by holding a liquid crystal layer between a pair of
5 substrates arranged to face to each other, wherein:
a twisted nematic type liquid crystal material used in said liquid crystal layer satisfies dielectric constant anisotropy $\Delta\epsilon$ of $0 < \Delta\epsilon < 8$ and twist elasticity modulus K_{22} of $K_{22} > 6.0$ pN when the
10 refractive index anisotropy Δn is $0.16 \leq \Delta n \leq 0.18$.

2. A liquid crystal display element configured by holding a liquid crystal layer between a pair of
substrates arranged to face to each other, wherein:
15 a twisted nematic type liquid crystal material used in said liquid crystal layer satisfies dielectric constant anisotropy $\Delta\epsilon$ of $0 < \Delta\epsilon < 13$ and twist elasticity modulus K_{22} of $K_{22} > 3.0$ pN when the refractive index anisotropy Δn is $0.18 \leq \Delta n \leq 0.20$.

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3. A liquid crystal display element as set forth in claim 1, wherein a range of a cell gap d indicating a distance between said substrates of said liquid crystal display element is $2.0 \mu\text{m} \leq d \leq 3.0 \mu\text{m}$.

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4. A liquid crystal display element as set forth in claim 2, wherein a range of a cell gap d indicating a distance between said substrates of said liquid crystal display element is $2.0\text{ }\mu\text{m} \leq d \leq 3.0\text{ }\mu\text{m}$.

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5. A liquid crystal display element as set forth in claim 1, wherein a range of a pixel size of a pixel of said liquid crystal display element is $18\text{ }\mu\text{m}$ or less.

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6. A liquid crystal display element as set forth in claim 2, wherein a range of a pixel size of a pixel of said liquid crystal display element is $18\text{ }\mu\text{m}$ or less.

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7. A projection type display device comprising:
a light source;

a light convergence optical system for guiding a light emitted from said light source to a liquid crystal display element; and

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a projection optical system for enlarging and projecting a light subjected to light modulation by said liquid crystal display element;

wherein said liquid crystal display element is configured by holding a liquid crystal layer between a pair of substrates arranged to face to each other, and

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a twisted nematic type liquid crystal

material used in said liquid crystal layer satisfies dielectric constant anisotropy $\Delta\epsilon$ of $0 < \Delta\epsilon < 8$ and twist elasticity modulus K_{22} of $K_{22} > 6.0$ pN when the refractive index anisotropy Δn is $0.16 \leq \Delta n \leq 0.18$.

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8. A projection type display device comprising:

a light source;

a light convergence optical system for guiding a light emitted from said light source to a

10 liquid crystal display element; and

a projection optical system for enlarging and projecting a light subjected to light modulation by said liquid crystal display element;

15 wherein said liquid crystal display element is configured by holding a liquid crystal layer between a pair of substrates arranged to face to each other, and

20 a twisted nematic type liquid crystal material used in said liquid crystal layer satisfies dielectric constant anisotropy $\Delta\epsilon$ of $0 < \Delta\epsilon < 13$ and twist elasticity modulus K_{22} of $K_{22} > 3.0$ pN when the refractive index anisotropy Δn is $0.18 \leq \Delta n \leq 0.20$.